

# LAB 16 - Importing Cogo Points

## Chapter Objectives:

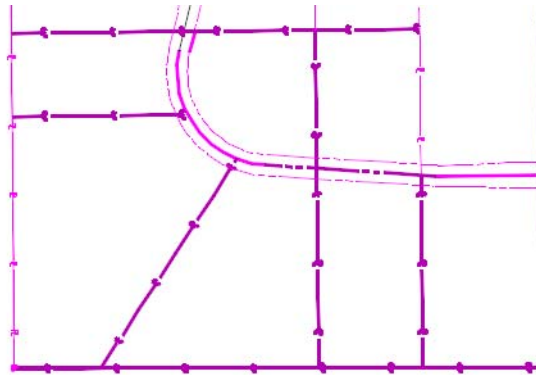
- Import Cogo Points from graphics
- Import Cogo Points from ICS

## Lab 16.1 - Importing Cogo Points from Graphics

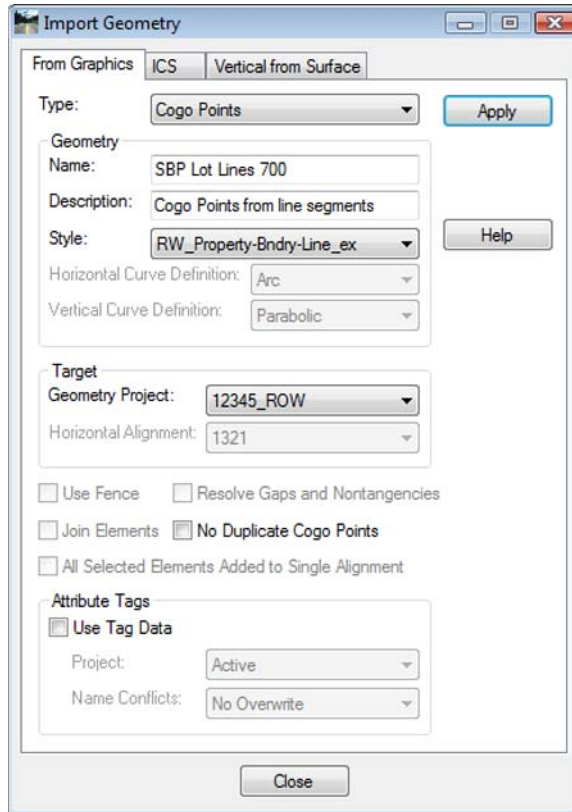
Graphic elements can be imported to generate geometry. Some of the valid element types are: lines, linestrings, cells, text, shapes, etc. Refer to the InRoads help topic Import Geometry

To import Cogo points from a graphics file;

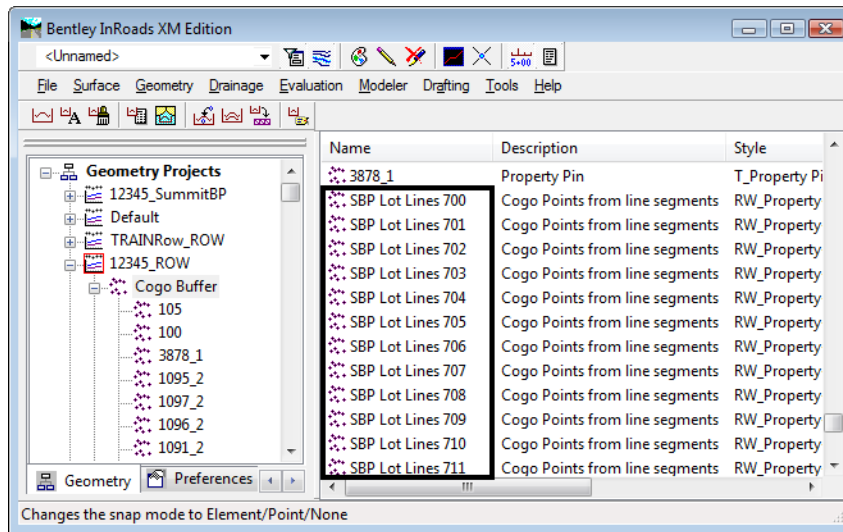
1. Identify graphics using a selection set or a MicroStation fence



2. Select **File > Import > Geometry > [From Graphics] Type – Cogo Points**



3. <D> **Apply**
4. **Verify the results**

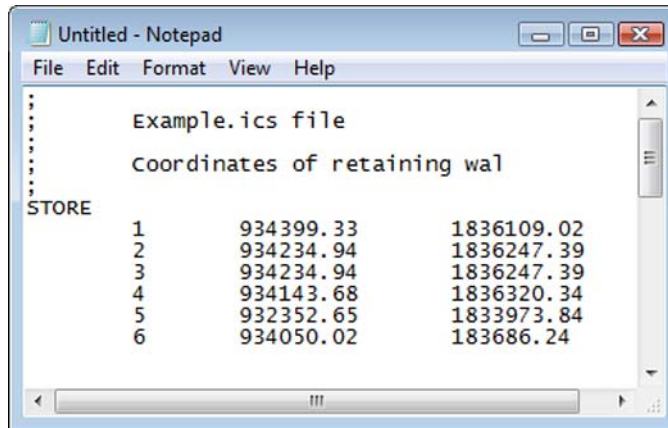


## Lab 16.2 - Importing Cogo Point from ICS

*From the CDOT manual: Roadway Design Using InRoads* – Importing Geometry from text files

Text files may be imported from several formats, the easiest of which to create is an *.ics* file. (Interactive Coordinate geometry Subsystem) This file type was first used with a product of the same name many years ago, but is still in use with InRoads today. It is basically a list of cogo commands along with the input for those commands.

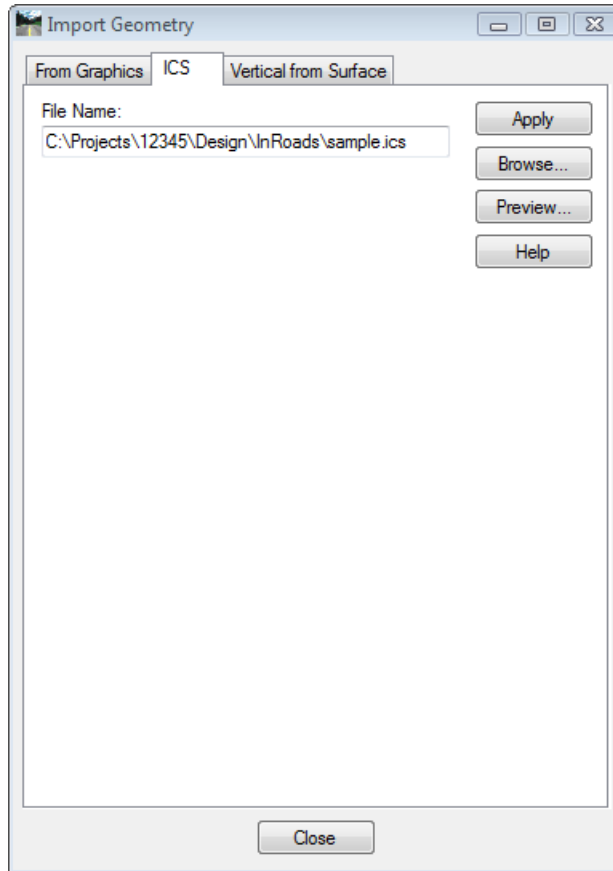
If you have a text file of coordinates, you can create an *.ics* file by adding a **Store** command at the top and formatting the file similar to the one shown below.



```
Example.ics file
Coordinates of retaining wal
STORE
1      934399.33      1836109.02
2      934234.94      1836247.39
3      934234.94      1836247.39
4      934143.68      1836320.34
5      932352.65      1833973.84
6      934050.02      183686.24
```

1. Choose **File > Import > Geometry > [ICS]**

2. **Browse** to find the file then choose **Apply**.



The cogo points will be added to the active geometry project. You may then use **Geometry > Utilities > Create/Edit Alignment** to join the points, forming an Alignment and **Geometry > Horizontal Curve Sets > Define Curves** to add curves to the alignment. You can also accomplish these same tasks within the .ics file. See the Bentley Help topic *Alpha Cogo*